

## Crystal ball questions on Shapes of molecules

*All of the following questions have not (as yet!) appeared in the NCEA Level 2 Exams*

**QUESTION:** For each of the molecules shown in the table

- i) draw a 3dimensional (3D) arrangement of the atoms in each molecule
- ii) name the shape of each molecule
- iii) state the bond angles

N <sub>2</sub>	H <sub>2</sub> O <sub>2</sub>	HOCl	F <sub>2</sub> or Cl <sub>2</sub> or Br <sub>2</sub> or I <sub>2</sub>
BF <sub>3</sub> or BCl <sub>3</sub>	NH <sub>3</sub>	C <sub>2</sub> H <sub>4</sub>	CF <sub>4</sub>
CCl <sub>4</sub>	BeCl <sub>2</sub>	SiH <sub>4</sub>	Br <sub>2</sub>
NH <sub>2</sub> OH	C <sub>2</sub> H <sub>6</sub>	HNO <sub>2</sub>	P <sub>4</sub>
C <sub>2</sub> H <sub>2</sub>	SCl <sub>2</sub>	O <sub>3</sub>	SO <sub>3</sub>
N <sub>2</sub> H <sub>4</sub>	CO		